



Docket No.: 0171-0778P

(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:

Takaya SATO et al.

Application No.: 09/940,541

9/940,541 Confirmation No.: 4738

Filed: August 29, 2001

Art Unit: 1746

For: LITHIUM BASED BATTERY

Examiner: J. CREPEAU

REPLY BRIEF

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

This Reply Brief is responsive to the Examiner's Answer that was mailed on June 23, 2006.

A fundamental feature of the presently claimed invention, which is recited in both of independent claims 1 and 3 herein, is the requirement that "the tensile elongation of the battery container covering is *selected* to cause the sheet to provide *insulation between the positive and negative electrodes* of the battery when the container is deformed" (emphasis supplied).

That feature was referred to in the section of the Appeal Brief entitled "(v) Summary of claimed subject matter" as follows:

... if a nail pierces the battery, the covering – which consists essentially of the high polymer sheet and is not laminated onto the container – extends between the positive and negative electrodes through the battery container, in order to prevent a large current from instantly flowing between the electrodes. See Figure 15.

In accordance with the present invention, the tensile elongation of the battery container covering is selected to cause the sheet to provide insulation between the positive and negative electrodes of the battery when the container is deformed. Specification, page 5, lines 29-30: "... the high polymer sheet is effectively deformed between the positive and negative electrodes"

That feature was referred to in the section of the Appeal Brief entitled "(vii) Argument" as follows (underlining in original!):

As pointed out in paragraph [0027] of JP '564 and depicted in Figure 6 thereof, when a needle 17 penetrates the battery, the laminated outer layer 6 does not move into the battery and shield the electrodes from one another.

Each of claims 1-8 herein expressly recites the feature: "the tensile elongation of the battery container covering is selected to cause the sheet to provide insulation between the positive and negative electrodes of the battery when the container is deformed". The Examiner has failed to demonstrate that the references teach or suggest this aspect of the claimed invention. Accordingly, the Examiner has failed to state a sustainable rejection of claims 1-8.

In any event, each of claims 1-8 herein expressly recites the feature: "the tensile elongation of the battery container covering is selected to cause the sheet to provide insulation between the positive and negative electrodes of the battery when the container is deformed". The Examiner has failed even to allege that the references teach or suggest this aspect of the claimed invention. Accordingly, the Examiner has failed to state a sustainable rejection of claims 1-8.

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The only discussion of this significant, expressly claimed feature of the present invention

in the Examiner's Answer appears on page 5 thereof, where the Examiner states that (underlining

in original):

... it is submitted the purpose of the invention of JP '564 is to prevent a needle from

penetrating the laminated battery bag the clear intent of the invention of JP

'564 is to provide a flexible outer layer having impact absorption property whereby the

needle should not penetrate the bag.

The Examiner's Answer fails to explain how the prior art meets the claimed feature that

the tensile elongation of the battery container covering is selected to cause the sheet to provide

insulation between the positive and negative electrodes of the battery when the container is

deformed.

If there are any questions, the Examiner and/or the Board is/are respectfully requested to

telephone Richard Gallagher, Reg. No. 28,781, at (703) 205-8008.

Dated: July 27, 2006

Respectfully submitted,

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